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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,804	10/06/2003	Teresa Joanne Hunkeler	I-2-0388.1US	3395
24374 7590 11/23/2011 VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103				
EXAMINER				
HAILU, KIBROM T				
ART UNIT		PAPER NUMBER		
2461				
NOTIFICATION DATE		DELIVERY MODE		
11/23/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

coffice@volpe-koenig.com

**Office Action Summary****Application No.**

10/679,804

**Applicant(s)**

HUNKELER ET AL.

**Examiner**

KIBROM T. HAILU

**Art Unit**

2461

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 22-25 and 29-42 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 22-25 and 29-42 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicants' arguments filed August 31, 2011 have been fully considered but they are not persuasive because the cited references in the previous Office Action disclose the claimed limitations. Therefore, the finality of this Office Action is proper.

The Applicants' arguments on page 8 to 12 of the REMARKS are not persuasive, and therefore the claims are not patentable.

The Applicants argue, "O'Shea fails to teach 'translating, in the WTRU, the QoS requirements defined according to the first wireless communication system to QoS requirements defined according to a second wireless communication system of a second type.' O'Shea teaches translating a frequency offset when handover from the W-CDMA system to the GSM system is performed. However, this frequency offset taught by O'Shea is *not* a QoS requirement. The frequency offset is simply a measurement. Thus, O'Shea does not suggest the concept of 'translating... QoS requirements' or, more specifically (emphasis added) 'translating, *in the WTRU*, the QoS requirements' as recited in claim 22."

The Examiner respectfully disagrees with the above arguments.

First, the claimed "QoS requirement" is a broad term. An ordinary skill in the art would broadly interpret QoS as a term defined by error rate, SIN, SNR, FER or BER, signal strength, channel condition, maximum transfer delay, delay variation or jitter, data rate and other parameters (and this is exactly what is explained in the specification, for example, please read paragraphs [0009]; [0022]). In fact, the specification clearly describes that there is no standardized of QoS requirements across multiple wireless communication systems (such as

CDMA2000, WLAN, UMTS and/or GSM). Therefore, the claimed QoS requirements can be expressed in one of the above parameters *including frequency error information*. The Applicants argue that the frequency error or offset information, in O'Shea, is simply a measurement. Although the Examiner respectfully submits that this is not relevant in view of what is claimed, the above parameters (listed in the spec are also measurements). That is, error rate, SIN, SNR, FER or BER, strength, delay, rate are all measurable parameters. Therefore, the Applicants' argument that frequency error information is measurement but QoS requirement is not persuasive.

Second, O'Shea clearly discloses that frequency error information in one wireless communication system (such as W-CDMA) is different than frequency error information in another wireless communication system (such as GSM). O'Shea also describes, when a wireless communication device (WCD) hands over from the first wireless communication system (W-CDMA) to the second communication system (GSM), **the frequency error information obtained in W-CDMA system is translated to the frequency error information in GSM system** (please read abstract; col. 2, line 65-col. 3, line 8; col. 7, lines 25-44).

Third, the Applicants argue that O'Shea fails to disclose the translation is *in the WTRU* (wireless transmit/receive unit). The Examiner respectfully disagrees with the above argument because O'Shea also illustrates the translation of frequency error information, which in this case QoS requirements, *in the wireless communication device (WCD)* (please read col. 7, lines 25-44, 57-63; claims 1 and 10). That is, it is *the WCD that translates or converts* the frequency error information in the first wireless communication system to frequency error information in the second communication system.

Finally, the Applicants' argument regarding the cited reference Kauhanen is based on the above argument, which the Examiner has already addressed in the above response. In regard to claims 25, 29-35 and 36-42, since the Applicants' arguments and reasons are based on the above addressed arguments, and the responses are applicable hereto.

Therefore, the above Applicants' arguments are not persuasive, and the claimed invention is not patentable in view of the provided references and the above responses to the arguments.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 22-25, 29-34 and 36-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (US 7,149,524 B2) in view of O'Shea (US 7,580,390 B2), and further in view of Kauhanen (WO 01/65881 A1).

**Regarding claim 22, 29 and 36**, Reynolds discloses a method for use in a wireless transmit/receive unit (WTRU) (fig. 1), the method comprising: the WTRU establishing a session in a first wireless communication system of a first type (col. 1, lines 27-37, illustrates initiating a session in one of the communication systems or technologies); the WTRU communicating data via the first wireless communication system using a first bearer, the WTRU performing a handover to the second wireless communication system, and in response to the handover, the WTRU communicating data via the second wireless communication system using a second bearer (fig. 2; col. 2, lines 15-37; col. 1, lines 13-21; col. 3, lines 55-62, clearly illustrating that the mobile station communicating the data a first bearer or channel and/or frequency, and in response to a handover performed to a different system, the mobile station communicates using different channel or bearer associated to the different system or technology), and the WTRU continuing the session in the second wireless communication system (col. 1, lines 39-46, 51-55; col. 2, lines 37-40, illustrate continuing a session in the second or different communication system after the handover).

Reynolds doesn't explicitly disclose translating, in the WTRU, the QoS requirements of defined according to the first wireless communication system to QoS requirements of defined according to a second wireless communication system of a second type; the first bearer has Quality of Service (QoS) requirements defined according to the first wireless communication system; the second bearer has the translated QoS requirements; and continue the session using the translated QoS requirements.

O'Shea teaches translating, in the WTRU, the QoS requirements of defined according to the first wireless communication system to QoS requirements of defined according to a second

wireless communication system of a second type (abstract; col. 2, line 65-col. 3, line 8; col. 7, lines 25-44, clearly describing that the WCD translates the quality requirements, such as frequency error, according to one communication system to another communication system).

O'Shea doesn't explicitly teach the first bearer has Quality of Service (QoS) requirements defined according to the first wireless communication system; the second bearer has the translated QoS requirements; and continue the session using the translated QoS requirements.

Kauhanen teaches the first bearer has Quality of Service (QoS) requirements defined according to the first wireless communication system (fig. 1; page 5, lines 23-24; page 3, lines 27-31, explaining the first connection path with the first quality parameter requirements defined according to the first communication system such as UMTS); and the second bearer has the translated QoS requirements (fig. 1; page 5, lines 28-30; page 12, line 26-page 13, line 2; page 11, lines 29-30, illustrating a second bearer or communication path defined according to a different or second communication system such as GSM); and continue the session using the translated QoS requirements (page 5, lines 25-27; page 12, line 14-col. 3, line 2, describe the continued using the translated or mapped quality parameter requirements).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use translating, in the WTRU, the QoS requirements of defined according to the first wireless communication system to QoS requirements of defined according to a second wireless communication system of a second type; the first bearer has Quality of Service (QoS) requirements defined according to the first wireless communication system; the second bearer has the translated QoS requirements; and continue the session using the translated QoS requirements as taught by O'Shea and Kauhanen, respectively, into Reynolds in order to

significantly decrease the acquisition time involved in converging to the correct frequency offset in the second communication system and to improve communication reliability, and to eliminate obliging to send quality parameter requirements of a communication system every time a call set-up is made, thus disconnection and/or interruption of call service would be avoided.

**Regarding claim 23**, Reynolds discloses the first wireless communication system is a universal mobile telecommunication system (UMTS) and the second wireless communication system is a CDMA2000 system.

**Regarding claim 24, 31 and 38**, Reynolds discloses the first wireless communication system is a cellular system and the second wireless communication system is a wireless local area network (WLAN) (fig. 1).

**Regarding claim 25, 32 and 39**, Reynolds discloses the first wireless communication system is a wireless local area network (WLAN) and the second wireless communication system is a cellular system (fig. 1).

**Regarding claim 30 and 37**, as applied above, Reynolds discloses the first and second communication systems. However, Reynolds doesn't explicitly disclose the first wireless communication system is a universal mobile telecommunication system (UMTS) and the second wireless communication system is a CDMA2000 system.

Kauhanen teaches the first wireless communication system is a universal mobile telecommunication system (UMTS) (page 2, lines 4-6). However, Kauhanen doesn't explicitly teach the second wireless communication system is a CDMA2000 system.

O'Shea teaches the second wireless communication system is a CDMA2000 system (O'Shea, col. 4, lines 27-54).



Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to the first wireless communication system is a universal mobile telecommunication system (UMTS) and the second wireless communication system is a CDMA2000 system as taught by Kauhanen and O'Shea into Reynolds in order to significantly decrease the acquisition time involved in converging to the correct frequency offset in the second communication system and to improve communication reliability, and to eliminate obliging to send quality parameter requirements of a communication system every time a call set-up is made, thus disconnection and/or interruption of call service would be avoided.

**Regarding claim 33 and 40**, the modified communication of Reynolds discloses the QoS requirements defined according to the first wireless communication system include at least one of: a data rate parameter; a jitter parameter; a QoS class parameter; or a transfer delay parameter (Kauhanen, page. 9, lines 10-21; page 12, lines 11-23).

**Regarding claim 34 and 41**, the modified communication of Reynolds discloses the application is a voice application (O'Shea, col. 1, lines 12-15; col. 7, line 57-col. 8, line 2).

5. Claims 35 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds in view of O'Shea and Kauhanen, as applied to claim 29 and 36 above, and further in view of Gubbi (US 7,092,374 B1).

As applied above, the modified communication of Reynolds discloses an application. However, the modified communication of Reynolds doesn't disclose the application is a streaming application or a game application.

Gubbi teaches the application is a streaming application or a game application (col. 5, lines 35-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the application is a streaming application or a game application as taught by Gubbi into the modified communication of Reynolds in order to provide better throughput performance and efficient communication.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIBROM T. HAILU whose telephone number is (571)270-1209. The examiner can normally be reached on Monday-Thursday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KIBROM T HAILU/

Primary Examiner, Art Unit 2461